

IN THE CLAIMS

Please cancel claims 14, 24, 27, 29 and 30 without prejudice or disclaimer.

Please amend claims 1, 3, 15, 16 and 28 as indicated below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (currently amended) A method for depositing a coating formed from a liquid coating forming material or a liquid mixed with substantially insoluble particles onto a substrate, said method comprising atomising the introduction of an atomised coating forming material, introducing the atomised coating forming material into an exciting medium, said exciting medium causing ~~chemical~~ activation of the atomised coating forming material ~~resulting in the formation of activated precursor species~~ prior to, or prior to and during, the material being deposited onto a substrate to form the coating thereon, the substrate surface to which the coating is applied is located inside the pulsed exciting medium during coating deposition said substrate being located ~~substantially inside the exciting medium during coating deposition,~~ and characterised in that the exciting medium, into which the atomised coating forming material is introduced, is pulsed and forms activated precursor species to the coating in the form of monomeric or oligomeric ions or radicals, these activated precursor species deposited onto the substrate to form the coating to significantly retain the chemical properties by substantially reducing dissociation of said atomized coating forming material.

Claim 2 (cancelled)

Claim 3 (currently amended) A method according to claim 1 characterised in that ~~an~~ atomizer is a plurality of atomizers are used to introduce the coating forming material with each atomizer having a monomer supply connected thereto.

Claim 4 (previously presented) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma discharge selectively operated at atmospheric pressure.

Claim 5 (previously presented) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma discharge selectively operated at less than atmospheric pressure

Claim 6 (original) A method according to claim 1 characterised in that at least one additional material is added into the atomised coating forming material.

Claim 7 (original) A method according to claim 6 characterised in that the additive material acts as a buffer to maintain the process pressure and/or carry the atomised forming material.

Claim 8 (previously presented) A method according to claim 6 characterised in that the additive material modifies and/or is incorporated into the atomised coating forming material and/or the resultant coating.

Claim 9 (original) A method according to claim 6 characterised in that the introduction of the additional materials to the atomised coating forming material is pulsed.

Claim 10 (original) A method according to claim 1 characterised in that the exciting medium is a pulsed plasma charge.

Claim 11 (original) A method according to claim 1 characterised in that the exciting medium is created by a pulsed flux of electromagnetic radiation.

Claim 12 (original) A method according to claim 1 characterised in that the exciting medium is created by a pulsed flux of ionised particles or radicals.

Claim 13 (cancelled)

Claim 14 (cancelled)

Claim 15 (currently amended) A method of producing a multi-layered material coating on a substrate characterised in that the substrate is repeatedly exposed to excited coating forming material produced in accordance with the method of claims 1, [[2,]] 3, 4, 5, 6, 7, 8, 9, 10, 11, 12[[, 13]] or 14.

Claim 16 (currently amended) ~~A method of producing a multi-layered material coating on a substrate characterised in that the substrate is repeatedly exposed to excited coating forming material produced in accordance with the method of claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 or 14, wherein according to claim 15 characterised in that~~ the nature of the exciting medium is changed during the coating formation.

Claim 17 (original) A method according to claim 15 characterised in that the coating formed on the substrate is post-treated by exposure to an exciting medium.

Claim 18 (original) A method according to claim 15 characterised in that the substrate is pre-treated prior to coating by exposure to the exciting medium prior to coating deposition.

Claim 19 (previously presented) A method according to claim 1 characterised in that the substrate is any of metal, glass, semiconductor, ceramic, polymer, woven or non-woven fibres, natural fibres, synthetic fibres, celluloaic material, or powder.

Claim 20 (previously presented) A method according to claim 1 characterised in that the coating forming material comprises an organic, organosilicon, organometallic, or inorganic material; or mixtures thereof.

Claim 21 (original) A method according to claim 1 characterised in that the atomised coating forming material is deposited via an ultrasonic nozzle supplied with coating forming material in the form of a liquid or liquid/solid slurry.

Claim 22 (original) A method according to claim 1 characterised in that the atomised coating forming material is deposited via a nebulizer supplied with coating forming material in the form of a liquid or liquid/solid slurry and a carrier gas.

Claim 23 (original) A method according to claim 1 characterised in that the atomised coating forming material is deposited via a plain-jet gas blast atomizer supplied with coating forming material in the form of a powder, and a carrier gas.

Claim 24 (cancelled)

Claim 25 (previously presented) A method according to claim 1 characterised in that the excitation medium is heated.

Claim 26 (original) A method according to claim 1 characterised in that the coated substrate is subject to derivatization.

Claim 27 (cancelled)

Claim 28 (currently amended) A method according to claim [[27]] 1 characterised in that the liquid is an organic or organo-silicon monomer or oligomers.

Claim 29 (cancelled)

Claim 30 (cancelled)

Claim 31 (original) A method according to claim 1 characterised in that the exciting medium contains the atomised coating forming material in the absence of other materials.

Claim 32 (withdrawn) Apparatus for the application of a coating to a substrate, said apparatus comprising a vacuum chamber, means for introducing coating forming material in an atomised form into the chamber, means for creating an exciting medium within the chamber, and a means for holding at least one substrate to be coated in the chamber, said atomising means directing the atomised coating forming material to pass through the exciting medium prior to reaching the substrate and characterised in that the means for creating the exciting medium is controlled so as to generate the exciting medium in a pulsed manner.

Claim 33 (previously presented) A method for depositing a coating onto a substrate, said method comprising the introduction of an atomised coating forming material into an exciting medium, said exciting medium causing activation of the atomised coating forming material prior to, or prior to and during the material being deposited onto a substrate to form the coating thereon, the exciting medium being pulsed, the substrate being repeatedly exposed to excited coating forming material, wherein the nature of the exciting medium is changed during the coating formation.

Claim 34 (previously presented) A method according to claim 33 wherein the coating formed on the substrate is post-treated by exposure to an exciting medium.

Claim 35 (previously presented) A method according to claim 33 wherein the substrate is pre-treated prior to coating by exposure to the exciting medium prior to coating deposition.